

Immunization Newsletter

North Dakota Department of Health

Division of Disease Control

Spring 2006

Mumps Update

As of May 8, 2006, Iowa had reported 1,609 confirmed, probable and suspect cases of mumps. Many other states, including South Dakota and Minnesota also have reported an increased number of cases. North Dakota has had three confirmed cases of mumps reported in 2006. The cases were reported from Mountrail, Rolette and Dickey Counties. None of the reported cases have been epidemiologically linked to Iowa. For more information about North Dakota mumps cases, visit www.health.state.nd.us/disease/Immunization/Mumps/MumpsInfo.htm. The website will be updated weekly.

The clinical case definition for mumps is an illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland lasting two or more days and without other apparent cause. Mumps should not be ruled out in someone who has symptoms clinically consistent with the disease based solely on the person having a MMR vaccination history. The vaccine is not effective in 10 to 20 percent of people, so infection is still possible even if vaccinated.

Health-care providers suspecting mumps should collect specimens for both serologic testing and viral culture. The Centers for Disease Control and Prevention (CDC) has found that serum IgM may be negative in up

to 50 percent to 60 percent of acute serum samples among people who have been previously vaccinated. **Mumps should not be ruled out solely on the basis of a negative IgM if the person has a history of mumps vaccination.**

The North Dakota Department of Health (NDDoH) is requesting that providers notify the NDDoH at 701.328.2378 or toll-free at 800.472.2180 immediately of all probable mumps cases, regardless if laboratory results are available or not. Providers should advise probable cases to exclude themselves from public activities until nine days after the onset of parotitis.

The NDDoH will be investigating all probable and confirmed cases.

- A probable mumps case is a person who meets the clinical case definition and
 - Has no serologic or virologic testing; or
 - Was vaccinated and has a negative IgM; or
 - Is not epidemiologically-linked to a confirmed or probable case
- A confirmed mumps case is a person who meets the clinical case definition and is epidemiologically linked to a confirmed or probable case. A laboratory-confirmed case does not need to meet the clinical case definition.

- The NDDoH will not investigate asymptomatic laboratory-confirmed mumps cases.

Vaccination is the best way to prevent mumps infection. Two doses of measles, mumps and rubella (MMR) vaccine are recommended for all children. The first dose of MMR vaccine typically is given at 12 to 15 months of age, and the second dose at 4 to 6 years of age. Children attending day cares in North Dakota are required to be age-appropriately immunized against mumps. Two doses of MMR are required for all children attending schools or colleges in North Dakota. Parents are encouraged to check their child's immunization record or contact their child's health-care provider or local public health unit to ensure their child's vaccinations are up-to-date. At this time, there is no recommendation to change the immunization schedule. Any changes to the immunization schedule will be based on the epidemiology of reported cases. **Adults born before 1957 are considered immune to mumps. Adults born in and after 1957 should be vaccinated with at least one dose of mumps-containing vaccine.**

According to the CDC, preventing transmission of mumps in health-care settings consists of four major components: (1) assessment of evidence of immunity of health-care workers, including documentation of clinical disease, laboratory evidence, birth before 1957 or appropriate vaccination history; (2) vaccination of those without evidence of immunity; (3) exclusion of health-care workers with active mumps illness as well as non-immune health-care workers who are exposed to confirmed, probable or suspected mumps patients; and (4) isolation of patients in whom mumps is suspected.

Although birth before 1957 is usually considered proof of immunity, during an outbreak, birth before 1957 by itself should not be used as evidence of immunity in health-care workers. During an outbreak, health-care workers born before 1957 should be asked for documentation of clinical disease or immunity. Those without such documentation should be vaccinated. North Dakota is currently not considered to be in an outbreak situation.

For more information about mumps, contact the NDDoH Division of Disease Control at 701.328.2378 or toll-free at 800.472.2180.



New Vaccines For Children Coordinator

Stacy Lovelace has been hired as the new Vaccines for Children (VFC) coordinator for the NDDoH. Stacy started her position in April. She grew up in Mott, N.D., and graduated from Mott Lincoln High School. Stacy attended Concordia College and received a bachelor's degree in biology and medical technology. After college, she worked at Mayo Clinic in Rochester, Minn., in the Clinical Bacteriology Lab for six years before taking her new position as VFC coordinator. Stacy lives in Bismarck with her husband and 1-year-old daughter.



2005-2006 School Immunization Rates

Results from the annual North Dakota School Immunization Survey show that children entering kindergarten during the 2005-2006 school year had the following immunization rates:

Vaccine	Immunization Rate
Polio	94.4%
DTP/DTaP/DT	95.3%
MMR	94.0%
Hepatitis B	96.4%
Varicella*	95.5%

*immune due to disease or immunization

The survey also showed that eight children exempted from vaccination due to medical reasons, seven due to religious reasons, 49 due to philosophical reasons and 18 due to moral reasons.

Immunization rates for kindergarten entry increased from the previous school year, but it is unknown if the increase is due to more children being immunized or an increase in reporting by the schools.

Enclosed are the 2006-2007 North Dakota School Immunization Requirements.



2005-2006 Day-Care Immunization Rates

North Dakota day cares are assessed every other year for immunization rates. For the 2005-2006 day care survey, 11,268 children's immunization rates were assessed. The following immunization rates were reported by day-care providers:

Vaccine	Immunization Rate
Polio	99.4%
DTP/DTaP/DT	99.3%
MMR	99.5%
Hib	99.5%
Varicella*	99.0%

*immune due to disease or immunization

It is important to remember that these rates are self-reported by day cares and may not reflect the actual rates in the state of North Dakota.

HPV

Anyone who is sexually active is at risk for human papilloma virus (HPV) infection. Eighty percent of sexually active women in the United States will have acquired HPV infection by age 50. Nearly one out of four of all 15 to 24-year olds in the country are infected with HPV.

HPV is spread easily through sexual intercourse, as well as genital-to-genital, hand-to-genital and oral-to-genital contact. Most people are unaware that they are infected with HPV because many infections are asymptomatic or sub-clinical. HPV is often under-diagnosed.

The burden of HPV in the United States and throughout the world is overwhelming. HPV is associated with 99.7 percent of cases of all cervical cancer in the world. In the United States, it is estimated that 10,370 new cases of cervical cancer occur each year. An estimated 10 women die every day in the United States from cervical cancer. There are an estimated 1 million new cases of genital warts each year in the United States due to HPV.

Health-care costs due to HPV are extreme. Estimates of the total direct cost of HPV in the United States among people ages 15 to 24 is \$3 billion per year. Ninety percent of this cost is due to follow-up of abnormal pap test results and treatment of cervical dysplasia.

Two HPV vaccines will be available in the future. Merck's Gardasil™ protects against four different strains of HPV: 6, 11, 16 and 18. In studies, the vaccine prevented 100 percent of cervical cancers associated with HPV types 16 and 18, compared with placebo. Merck applied for FDA licensure for the vaccine in December 2005. The schedule and age indications are three doses for people ages nine through 26. GlaxoSmithKline's Cervarix™ vaccine is expected to be submitted to the FDA for approval at the end of this year.

Menactra™ Is VFC-Only Starting June 1, 2006

Effective June 1, 2006, Menactra™ will be available only to children who are eligible for the Vaccines for Children (VFC) Program. Due to national supply issues, the NDDoH is not able to obtain enough Menactra™ to supply it universally to all recommended adolescents in North Dakota. These supply issues are expected to last for the next couple of years. Children eligible for VFC vaccine must be 18 years of age and younger and be Medicaid-eligible, have no insurance, be Native American or be underinsured (insurance does not cover vaccinations). Underinsured children must be vaccinated with VFC vaccine only at rural health clinics and federally qualified health centers. Providers should purchase private supplies of Menactra™ to vaccinate adolescents who have insurance.

Menactra™ is universally recommended for all adolescents, ages 11 to 12, catch-up at high school entry (age 15) and adolescents who will be attending college and living in dormitories. Other adolescents who wish to reduce their risk for meningococcal disease also may be vaccinated.



Fetal Tissue and MMR Vaccine

Reports of parental deferrals of MMR vaccine due to fetal tissue being used in the development of MMR vaccine have been occurring in different areas of the state. The following information is from a letter that the NDDoH received from Merck. Hopefully the information will help providers respond to these parental concerns.

Live-attenuated viral vaccines, such as rubella and varicella vaccine, are developed by growing the wild-type virus in alternative cell types (fetal tissue). Growth in the alternative cell types usually causes a loss of virulence (attenuation) in the virus. Merck and other vaccine manufacturers use two human cell lines for certain vaccines. This process is FDA approved.

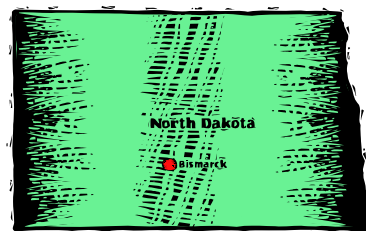
One cell line was first prepared in 1962 from a legal, therapeutically aborted pregnancy in Sweden. The cells from this line have divided many times and have gone through many generations. The cells now used to make current vaccines are from the many generations of growth from the original tissue and no additional fetal tissue has been added.

Merck is the only manufacturer of rubella and varicella vaccine in the United States. If parents have concerns about this issue, please feel free to refer their questions to the NDDoH at 701.328.2378 or toll-free at 800.472.2180.

Rotavirus Vaccine

Rotavirus vaccine is still not available for order from the NDDoH. The NDDoH is currently waiting for funding for the vaccine from the federal government. Funding is expected in the near future. Providers will be

notified as soon as the vaccine becomes available. The new rotavirus Vaccine Information Statement (VIS) is available online at www.cdc.gov/nip/publications/VIS/vis-rotavirus.pdf. The VIS is also available for order from the NDDoH. VISs must be given to parents prior to vaccine being administered for every dose of each vaccine.



State-Supplied Hepatitis A Vaccine

There have been many questions regarding to whom state-supplied hepatitis A vaccine may be given. The vaccine is available for all North Dakota children between the ages of 12 and 23 months. The NDDoH encourages providers to recommend hepatitis A vaccine to all infants in this age group.

Providers also may vaccinate older children ages 18 and younger if parents are requesting hepatitis A vaccine. Please do not recommend universal vaccination to this age group, as the NDDoH does not have an adequate supply of hepatitis A vaccine to do this.

Counties at high-risk for hepatitis A and that have previous hepatitis A vaccination programs may continue to vaccinate all children through age 18. Counties that have been previously considered at high-risk for hepatitis A are McKenzie, Mountrail, McLean, Sioux, Rolette, Benson, Barnes, Ramsey and Eddy. Not all of these counties had previous hepatitis A vaccination programs.

Insurance Fields Added to NDIIS

As of **Monday, May 8**, insurance information for all doses administered is required to be entered into the North Dakota Immunization Information System (NDIIS). Providers must enter the patient's insurance carrier name and policy number for each dose when entering into the NDIIS. This information will save once it has been entered, but must be verified for each dose. This information is required only for children age 18 and younger who have health insurance or are underinsured.

Insurance information is not required to be entered for doses given in the past. For example, if a provider enters an immunization history for a child who moved to North Dakota, the insurance information is not required for that history.



Providers must enter this data. In order for North Dakota to remain a universal state and supply vaccines to all children, the North Dakota Department of Health (NDDoH) needs this information. Without the insurance information, the NDDoH will not be reimbursed for vaccines given to insured children.

Please notify the NDDoH if a child's insurance carrier is not listed in the NDIIS.

The immunization program will add the carrier to the list.

The NDDoH is available for NDIIS trainings. Please contact the NDDoH to schedule a NDIIS training if needed.

New Vaccine Administration Record

The NDDoH has updated the vaccine administration record (VAR). The new VAR includes a space to record the patient's insurance carrier and policy number. The new VARs are available for order from the immunization program by submitting a forms order form online or by mail or fax. Providers may continue to use old VARs and just write in the patient's insurance carrier and policy number somewhere on the form, so the information can be added to the NDIIS.

2006-2007 State-Supplied Influenza Vaccine

The NDDoH receives a certain amount of influenza vaccine each year from the federal government. This year, North Dakota's influenza vaccine allocation was cut by more than half from the previous year. As a result, the NDDoH has ordered private vaccine from a couple of vaccine manufacturers.

The NDDoH is expecting to have influenza vaccine available for order in the near future. As usual, the vaccine will be supplied on a first-come, first-serve basis. The vaccine will be allocated to providers based on previous influenza vaccine orders and doses administered entered into the NDIIS from the 2005-2006 influenza season. A memo and influenza vaccine order form will be sent to providers when available.

As everyone knows, there is always uncertainty when ordering influenza vaccine, so providers are encouraged to be patient, as the NDDoH is doing what it can to provide influenza vaccine to all children in North Dakota who are recommended to have it. Most likely, the NDDoH will not have enough vaccine to supply to providers for the newly ACIP-recommended group: all children between the ages of 2 and 5. If possible, providers should try to secure vaccine for this age group.

Please contact the NDDoH Immunization Program at 701.328.2378 or toll-free at 800.472.2180 with any questions regarding this issue.



June ACIP Meeting

The next ACIP meeting will be held in Atlanta, Ga., June 29 through 30. The agenda for the meeting is not available yet, but possible topics could include HPV vaccine and second-dose varicella vaccination.

For more information on the ACIP and the upcoming meeting, visit www.cdc.gov/nip/ACIP/default.htm.

2005 Reported Vaccine Preventable Diseases in North Dakota*

Disease	Case Count
Chickenpox	120
Diphtheria	0
Hepatitis A	3
Hepatitis B (acute)	0
Influenza	3754
Measles	0
Meningococcal	2
Mumps	5
Pertussis	165
Polio	0
Rubella	0
Tetanus	0

*Provisional data

Sending Mail to the NDDoH

The NDDoH requests that when providers send mail (temperature logs, doses-administered reports, orders etc.) to the Immunization Program, please include either Immunization Program or Division of Disease Control in the address so that the mail is directed to our division. If the address only states North Dakota Department of Health, the employees who sort the mail are unable to determine who the mail should go to. The address for the NDDoH is:

North Dakota Department of Health
Division of Disease Control
600 East Boulevard Ave., Dept. 301
Bismarck, ND 58505-0200



Questions and Answers

1. Is there a national shortage of Prevnar® currently occurring?

A. No. Prevnar® is not in shortage. If providers ordered Prevnar® and were unable to obtain the vaccine from the NDDoH, it was due to short-term funding issues. Prevnar® is currently available for order. Hopefully this issue will not occur in the future. Prevnar® should be given to all children at 2, 4 and 6 months of age. A booster dose should be given at 12 to 15 months.

2. Is a third dose of MMR vaccine recommended due to outbreaks of mumps occurring in Iowa and other states?

A. No. A third dose of MMR vaccine is not recommended. MMR vaccine is highly effective, but some people do not respond to vaccination. If an individual did not respond to the first two doses, they most likely will not respond to a third dose.

3. What is the minimum interval between the third and fourth dose of DTaP vaccines?

A. The minimum interval between the third and fourth dose of DTaP vaccines is six months. The fourth dose must not be given earlier than 12 months of age. If this dose is accidentally given at a minimum interval of four months, the dose does not need to be repeated. If given sooner than four months, the dose should be repeated at the appropriate time.

4. What should I do if I accidentally administered DTaP instead of Tdap to an adolescent?

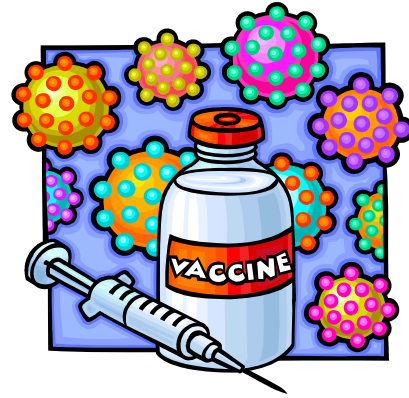
A. The dose does not need to be repeated. The dose should be counted as valid. Since DTaP contains a higher amount of diphtheria toxoid and acellular pertussis antigens, there is a greater likelihood of a local reaction.

Upcoming Events:



- “Pandemic Influenza and Public Health Law: What Public Health Departments Need to Know” satellite broadcast: **June 8, 12 p.m. – 1:30 p.m.**
- ACIP meeting in Atlanta: **June 29 – 30**
- Seventh National Conference on Immunization Coalitions in Denver: **August 9 – 11**
- “Immunization Update 2006” satellite broadcast: **August 10, 8 a.m. – 10:30 a.m. or 11 a.m. – 1:30 a.m.**

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